

## **ABSTRACT**

A flash memory controller is disclosed. The flash memory controller includes a processor for receiving at least one request from a host system. The flash memory controller further includes an index comprising information regarding sectors of a flash memory. The processor can utilize the index to determine the sectors of the flash memory that are available for programming, reprogramming, or reading. In another aspect of the present invention, the flash memory controller further includes a first-in-first-out unit (FIFO) for recycling obsolete sectors so that they are available for reprogramming.